



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,569	02/25/2005	Terry Cassaday	56836.40/ejg	3042

33797 7590 03/15/2010

MILLER THOMPSON, LLP  
Scotia Plaza  
40 King Street West, Suite 5800  
TORONTO, ON M5H 3S1  
CANADA

EXAMINER
----------

MCPARTLIN, SARAH BURNHAM

ART UNIT	PAPER NUMBER
----------	--------------

3636

MAIL DATE	DELIVERY MODE
-----------	---------------

03/15/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/525,569	<b>Applicant(s)</b> CASSADAY, TERRY	
	<b>Examiner</b> SARAH B. MCPARTLIN	<b>Art Unit</b> 3636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 30-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 30-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 30-35, 38-41 and 43-47 are rejected under 35 U.S.C. 102(e) as being anticipated by Gruteser et al. (6,870,477). With respect to claim 30, Gruteser et al. discloses a member (100) selected from the group of member consisting of a chair member, a bed member and a lounge member, said member having moving parts (unlabeled), in the form of a seat or back that is deformable (column 6, line 20), and a controller (240) for said moving parts which outputs information from said member concerning directions for the operation of said controller for the moving parts including information output circuitry (130) and an energy converter, either in the form of "solar cells" (column 5, line 17) or wheels (105) "used to generate electricity" (column 5, line 29) which converts energy to which the member is exposed (i.e. solar energy or kinetic energy) to electrical energy for powering said information output circuitry wherein said information output circuitry outputs information to an occupant of the member, given that the controller (240) may include a PC having "a user interface including input devices and displays which may be used **by the occupant of the chair** to make manual

Art Unit: 3636

adjustments to environmental parameters and which may also convey information **to the occupant** about the status or results of information carrying signals sent from or received by the chair systems” (column 6, lines 7-12), regarding directions for the operation of the controller for the moving parts without producing movement of the parts.

With respect to claim 31, said energy converter comprises a solar panel (column 5, line 17) on an exposed surface of said member.

With respect to claim 32, said information output circuitry (130) is further linked to a biorhythm sensor (column 3, lines 21-27) (110).

With respect to claim 33, a digital display, in the form of a PC with an input device and display (column 6, lines 4-7) also powered by said one or more energy converts (given that the digital display is part of the chair systems (215)) and displaying information from said biorhythm sensor.

With respect to claim 34, said member (100) comprises a chair and said energy converter converts motion of a moveable portion of the chair (i.e. forward and backward motion of the chair back (column 5, lines 23-25) or rotational motion of the wheels (105)) to electrical energy.

With respect to claims 35 and 46-47, Gruteser discloses a member (100) selected from the group of members consisting of a chair member, a bed member and a lounge member, said member (100) including an information output device (130)(140)(145)(240) which outputs information from said member, an energy converter which converts energy to which the member is exposed to electrical energy for

Art Unit: 3636

powering said information output device (130)(140)(145)(240), wherein said information output device (130)(140)(145)(240) comprises a control (240) for a moveable part (i.e. a vibrator (column 6, line 23)) of said member, said control (240) outputting information to an occupant of the member, in the form of a signal, regarding function of said control without producing movements of the chair (column 6, lines 7-12). The effectors (210) actually produce movement of the chair.

A visual display, in the form of a PC, is also powered by said energy converter, said visual display displaying the directions for use of the control (240).

With respect to claim 38, an electrical rechargeable power pack (212) is charged by said energy converter, said power pack storing the electrical energy and dispersing the electrical energy required.

With respect to claim 39, said member (100) comprises a chair having rolling casters (105) for generating said electrical energy.

With respect to claim 40, said member (100) comprises a chair and said chair has a back and a seat and a moveable hinge between said back and seat for generating said electrical energy (column 5, lines 20-23).

With respect to claim 41, an electrically operated body repositioning means, in the form of a deforming seat or back of the chair (column 6, lines 20-21) is powered by said energy converter.

With respect to claim 43, Gruteser discloses a chair (100) having electrical power requirements, and a generator (in the form of solar cells or casters (105) carried by said

Art Unit: 3636

chair for converting energy to which the chair is exposed to electrical energy for powering said electrical power requirements.

With respect to claim 44, a rechargeable battery (212) is carried by the chair, said generator recharges said battery (212), said battery powering said electrical power requirements of said chair.

With respect to claim 45, a chair (100) having electrical power requirements for displaying information to an occupant of the chair regarding the operation of a plurality of controls for moving a plurality of parts respectively of the chair without producing movement of said parts comprising: an energy converter means (i.e. in the form of solar cells or rolling casters (105)) carried by said chair for: providing power to said controls to move the parts of the chair respectively and to display said information to the occupant regarding directions for the operation of the controls, without affecting movement of said parts, to inform the occupant to use the controls to move such parts of the chair respectively and providing power to said display for displaying information regarding the directions for operation of said controls without producing movements of said parts respectively. The devices, sensors, wireless communication devices all require electrical energy as recited in column 4, lines 55-58. The on board energy converters are used to provide this energy.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3636

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gruteser et al. (6,870,477) in view of Sparks (6,204,767). As disclosed above, Gruteser disclosed all claimed elements except the provision of audio feedback from the control.

Sparks teaches the use of audio feedback, output from speaker element (10), triggered by control unit (34)(36)(38)(40).

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to incorporate a sound signaling system into the chair (100) disclosed by Gruteser. Such a modification would enable people located in the vicinity of the seat to become aware of a situation regarding the seat occupant.

5. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gruteser et al. (6,870,477) in view of Burt (US 2002/0056709). As disclosed above, Gruteser reveals all claimed elements with the exception of said body-repositioning means comprising a lumbar adjustment member controlled by a timer.

Burt teaches the use of lumbar supports (20) that include heated electrically conductive elastomeric materials. The expansion and contraction of the lumbar elements are traditionally controlled by a timer (paragraph [0004]) and provide a vibrating motion.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to add lumbar support elements to the seat disclosed by Gruteser.

Art Unit: 3636

Such a modification would ensure that seat occupants do not get fatigued backs while sitting in the seat.

### ***Response to Amendment/Arguments***

6. Applicant's arguments filed 9 December 2009 have been fully considered but they are not persuasive. Applicant argues that there is no disclosure by Gruteser of outputting information concerning directions of operation of the controller without producing movement of the parts, nor displaying information to an occupant of the chair regarding the operation of a plurality of controls for moving a plurality of parts respectively of the chair without producing movement of said parts. The controller (240) may include a PC having "a user interface including input devices and displays which may be used by the occupant of the chair of make manual adjustments to environmental parameters and ***which may also convey information to the occupant about the status or results of information carrying signals from or received by the chair systems.***" The Examiner highlights that the information conveyed to the occupant about the status or results of information carrying signals from or received by the chair system includes information regarding "effectors (not shown) to control various aspects of the chair. For instance, if the information contained in the signal indicates that a person of a particular weight occupies the chair, the effectors in the chair may be signaled by the communications devices to adjust the ergonomic settings of the chair." (column 5, line 66- column 6, line 4). The ergonomic settings of the chair include the environmental parameters recited by applicant, but also include the adjustment of haptic



Art Unit: 3636

devices which communicate with the user through a sense of touch. Such devices require a set of moving parts to provide the disclosed sense of touch to the seat occupant. These haptic devices constitute a plurality of parts controlled by the controller (240). The Examiner contends that the “status or results of information carrying signals sent from or received by the chair systems” include, for example, the weight of the seat occupant. This information constitutes directions regarding the operation of the controller which controls a series of haptic devices. The haptic devices constitute a plurality of moveable parts. The Examiner contends that the prior art continues to read on the claimed invention.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 3636

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SARAH B. MCPARTLIN whose telephone number is (571)272-6854. The examiner can normally be reached on M-Th 7:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Dunn can be reached on 571-272-6670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sarah B. McPartlin/  
Primary Examiner, Art Unit 3636

10 March 2010